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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,654	12/31/2003	Thorsten Brants	0026-0055	2828
44989	7590	11/01/2007	EXAMINER	
HARRITY SNYDER, LLP			VO, HUYEN X	
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FAIRFAX, VA 22030				
			ART UNIT	PAPER NUMBER
			2626	
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			11/01/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/748,654

Applicant(s)

BRANTS ET AL.

Examiner

Huyen X. Vo

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Haug et al. (US 6292771).

3. Regarding claims 1, 16, and 28-29, Haug et al. disclose a computer-implemented method, device, and computer-readable memory device of identifying whether a sequence is a semantic unit, the method comprising:

calculating a first value representing a coherence of terms in the sequence (*col. 6, line 54 to col. 7, line 9, check spelling of words*);

calculating a second value representing variation of context in which the sequence occurs (*col. 7, lines 10-33, determine a replacement for mis-spelled words*);

determining whether the sequence is a semantic unit based at least in part on the first and second values (*col. 7, line 34 to col. 8, line 56*); and

outputting an indication of whether the sequence is a semantic unit (*col. 7, line 34 to col. 8, line 56*).

4. Regarding claims 2-3 and 5, Haug et al. further disclose the method of claim 1, wherein the coherence of the terms in the sequence is calculated relative to a collection

of documents (*col. 6, line 54 to col. 7, line 9, check spelling of words*), wherein the coherence of the terms in the sequence is calculated as a likelihood ratio that defines a probability of the sequence occurring in the collection of documents relative to parts of the sequence occurring (*col. 6, line 54 to col. 7, line 9*), and wherein the coherence of the terms in the sequence are defined as not being sufficient unless a threshold is met (*col. 7, lines 15-21, most probable candidate*).

5. Regarding claims 7-8 and 14-15, Haug et al. further disclose the method of claim 1, wherein the variation of context in which the sequence occurs is calculated relative to a collection of documents (*col. 7, lines 9-33*), wherein the variation of context in which the sequence occurs is calculated as a measure of entropy of the context of the sequence (*col. 7, lines 9-33*), wherein the sequence includes three or more words (*col. 7, lines 9-67, within scope of the reference*), and applying one or more rules to the sequence, and wherein determining whether the sequence is a semantic unit is further based at least in part on the application of the one or more rules (*col. 7, lines 9-67, within scope of the reference*).

6. Regarding claims 17-20, Haug et al. further disclose the device of claim 16, wherein the context terms include terms to the left and right of the sequence (*col. 9, lines 17-51*), wherein the coherence of the terms in the sequence is calculated relative to the collection of documents (*within scope of the reference*), wherein the coherence of the terms in the sequence is calculated as a likelihood ratio that defines a probability of

the sequence occurring in the collection of documents relative to parts of the sequence occurring (*col. 7, lines 9-33*), and wherein the variation of context in which the sequence occurs is calculated as a measure of entropy of the context of the sequence (*col. 7, lines 9-33*).

7. Regarding claims 25-27, Haug et al. further disclose the device of claim 16, wherein the decision component is further configured to compare the results of the coherence component and the variation component to threshold values and identify the sequence as a semantic unit based at least in part on the comparisons (*col. 7, line 1 to col. 8, line 56*), a heuristics component configured to apply one or more predefined rules to the sequence, wherein the decision component is further configured to determine whether the sequence constitutes a semantic unit based at least in part on application of the one or more rules (*col. 7, line 1 to col. 8, line 56*), and wherein the one or more rules are exclusionary rules that determine when certain sequences are not semantic units (*col. 7, line 1 to col. 8, line 56*).

#### ***Allowable Subject Matter***

8. Claims 4, 6, 9-13, and 21-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Boguraev et al. (US 6553373) is considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen X. Vo whose telephone number is 571-272-7631. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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10/20/2007

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